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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,758	02/14/2002	John J. Hahn	650770.900S2	2392

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EXAMINER	
HEITBRINK, JILL LYNNE	

ART UNIT	PAPER NUMBER
1732	

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/076,758	HAHN ET AL.	
	Examiner	Art Unit	
	Jill L. Heitbrink	1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 December 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) *1-5* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *6-10* is/are rejected.

7)☒ Claim(s) *11-14* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on Dec. 22, 2004 has been entered.

Election/Restrictions

2. Applicant's election of Group II, claims 6-14 in the reply filed on April 28, 2004 is acknowledged (claims 1-5 are indicated as withdrawn). Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 6, 7, 8, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hehl (Pat. No. 3,596,325) taken together with Miyahara et al. (Pat. No. 5,186,954).

5. Hehl discloses a method of retrofitting an injection molding machine to include a second injection cylinder (III). The injection molding machine has a first stationary platen (28 in Fig. 1 or 16 in Fig. 7) holding a stationary mold portion (60) in communication with an injection cylinder and a second movable platen (33) holding a movable mold portion (59) joining with the stationary mold portion (col. 2, lines 59-62) with movement of the movable platen. A mounting (52,53) is directly attached to the stationary platen (16, Fig. 7) and a second injection cylinder (III) is adjustably attached to the mounting. Miyahara et al. teaches the interface between two injection cylinders and the operation of the control for a single cylinder used to determine the set up for the second cylinder. It would have been obvious to a person of ordinary skill in the art to use the control system of Miyahara et al. in the single and double injection molding operations of Hehl since the providing of control for the operation of the injection molding machine is necessary for the complex operation of the multiple injections. The control moving the injection cylinder toward and away from the stationary platen would have been obvious in the normal operation such as retraction after filling the mold cavity for cooling of the part in the cavity and the plastication in the injection cylinder.

6. Claims 6, 7, 8, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruegg (Pat. No. 3,817,679) taken together with Miyahara et al. (Pat. No. 5,186,954).

7. Ruegg discloses an injection molding machine with three to five injection cylinders attached to mountings attached to the stationary platen, see col. 2, lines12-15 and col. 4, lines 43-52. The injection molding machine clearly has what applicant

considers as being a standardized stationary platen. The method of assembling the injection molding machine of Ruegg would have included attaching the mounting 4 directly to the stationary platen 2 and the attaching of a second injection cylinder 8 to the mounting 4, col. 3, lines 24-28. The attaching is adjustable by the use of slots 11, see col. 3, lines 56-64. Ruegg does not describe any electronic controls for the injection molding machine. Miyahara et al. teaches the interface between two injection cylinders and the operation of the control for a single cylinder used to determine the set up for the second cylinder. It would have been obvious to a person of ordinary skill in the art to use the control system of Miyahara et al. in the multiple injection molding operations of Ruegg since the providing of control for the operation of the injection molding machine is necessary for the complex operation of the multiple injections. The control moving the injection cylinder toward and away from the stationary platen would have been obvious in the normal operation such as retraction after filling the mold cavity for cooling of the part in the cavity and the plastication in the injection cylinder. As to the "retrofitting", Ruegg, col. 1, lines 55-68, describe having different numbers of injectors attached to the stationary platen. Therefore, the addition of an injector to a platen with injectors attached is within the skill of the art of the assembly of the Ruegg injection molding machine. As to claim 8, the second injection molding cylinder being attached to the top of the stationary platen, rather than the bottom of the platen as shown in Fig. 8 of Ruegg, would have been an obvious alternative arrangement in the art of injection molding since injection molding machines with a lower movable platen is known in the art.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ruegg (Pat. No. 3,817,679) taken together with Miyahara et al. (Pat. No. 5,186,954) as applied to claims 6-10 above, and further in view of Hehl (Pat. No. 3,596,325).

9. Hehl teaches a pivoted injection molding machine wherein the injection cylinder is attached to the top of the stationary platen. The second injection molding cylinder being attached to the top of the stationary platen, rather than the bottom of the platen as shown in Fig. 8 of Ruegg, would have been an obvious alternative arrangement in the art of injection molding since injection molding machines with a lower movable platen is known in the art.

Allowable Subject Matter

10. Claims 11-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not teach a second injection molding cylinder attached to a mounting directly to the movable platen.

Declaration Under 37 CFR 1.132

11. The declaration under 37 CFR 1.132 filed December 22, 2004 is insufficient to overcome the rejection of claims 6-10 based upon Hehl (Pat. No. 3,596,325) taken together with Miyahara et al. (Pat. No. 5,186,954) as set forth in the Office action because:

12. It include(s) statements which amount to an affirmation that the affiant has never seen the claimed subject matter before. This is not relevant to the issue of nonobviousness of the claimed subject matter and provides no objective evidence thereof. See MPEP § 716. Affiant states "no one has ever described, offered or sold a kit for adding a second injector to a third-party standard, single injector injection molding machine prior to the above invention." However, Hehl shows a single injector injection molding machine which optionally a second injector can be attached. The injection molding machine in Hehl can have other "additional special units" such as core extractor or unscrewing device attached, see col. 1, lines 30-33.

13. It states that the claimed subject matter solved a problem that was long standing in the art. However, there is no showing that others of ordinary skill in the art were working on the problem and if so, for how long. In addition, there is no evidence that if persons skilled in the art who were presumably working on the problem knew of the teachings of the above cited references, they would still be unable to solve the problem. See MPEP § 716.04. Hehl provides an injection molding machine that solves the same problem by adding a second injector.

14. The commercial success is not convincing to overcome the evidence of obviousness from the prior art. The comparison is to most standard injection molding machines with standardized surfaces of the movable or stationary platen, wherein Hehl would not be included in the standardized surface. However, the claims do not define any limitation as to structure, stating only "one of movable and stationary platens". Therefore, the comparison is not commensurate with the claims.

15. In view of the foregoing, when all of the evidence is considered, the totality of the rebuttal evidence of nonobviousness fails to outweigh the evidence of obviousness.

Response to Arguments

16. Applicant's arguments filed December 22, 2004 have been fully considered but they are not persuasive.

17. Applicant argues that Hehl does not show the injector mounted to the platen holding the mold. However, Hehl, col. 2, lines 31-33, discloses the box shaped casing or tube 16 having a fr5ontal face 28 which is the clamping surface for the casting mold part 60.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill L. Heitbrink whose telephone number is (571) 272-1199. The examiner can normally be reached on Monday-Friday 9 am -2 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jill L. Heitbrink
Primary Examiner
Art Unit 1732

jlh